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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,109

07/11/2003

Yves Le Brech

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RATNERPRESTIA
P O BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER

SALVATORE, LYNDIA

ART UNIT

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1794

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10/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,109	Applicant(s) LE BRECH ET AL.	
	Examiner Lynda M. Salvatore	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,11 and 15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,11 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/24/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks filed 8/13/07 have been fully considered and entered. Claim 1 has been amended and new claim 15 has been added. Applicant's amendments are found sufficient to overcome the rejections of claims 1,3-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al., US 2003/0019598 A1 in view of Flaris et al., US 6,228,948. Specifically, the prior art of Nakagawa et al., fails to teach a heat sealing layer comprising both natural and synthetic fibers. As such, these rejections are hereby withdrawn. However, Applicant's amendment necessitated further searching and upon further consideration the following new ground of rejection is set forth herein below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1,3-7, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al., US 2003/0019598 A1 in view of Byalik et al., WO 99/23306 and further in view of Flaris et al., US 6,228,948.

The published patent application issued to Nakagawa et al., teach a filter laminate comprising a heat sealing layer comprising a mixture of synthetic pulp and synthetic short fiber. Said heat sealing layer is further joined to a substrate layer comprising natural fiber (abstract and section 0080-0081). Nakagawa et al., teach a synthetic pulp short fiber formed from a polyolefin based mixture of (a) an ethylene- α,β -unsaturated carboxylic acid copolymer which can formed

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into a pulp like material having good heat-sealability and hot tack and (b) polyethylene resin (Sections 0050-0066). Suitable synthetic fibers include polyolefin fibers such as those derived from polyethylene or polypropylene as well as polyester and polyamide (Section 0075). With specific regard to the recited adhesion promoter limitation, it is the position of the Examiner that the synthetic pulp resin composition comprising a mixture of (a) and (b) meets said limitation. Specifically, the Examiner considers the teaching of synthetic pulp fibers formed from a resin composition having good heat sealability and hot tack sufficient to provide the necessary adhesion promoting properties to the claimed heat sealable ply comprising synthetic fibers. With regard to the intended use recited by Applicant in claim 11, Nakagawa et al., teach that the laminate is suitable to form tea bags (Abstract).

With regard to claim 4, recall, Nakagawa et al., taught the use of polyester, polypropylene or polyethylene synthetic fibers in addition to the synthetic pulp fibers (Nakagawa et al., Section 0075).

With regard to claim 5, Nakagawa et al., teach a substrate comprising natural fibers such as abaca pulp (Section 0081). Said substrate layer is formed as a wet web having air permeability and strength (Section 0081 and Section 0084). As such, it is expected that the substrate layer of Nakagawa et al., would have the desired wet strength.

With regard to claim 6, Nakagawa et al., teach that the substrate layer has a basis weight ranging from 10-50 g/m² (Section 0081). With regard to the claimed air permeability properties, Nakagawa et al., fails to teach the specific air permeability properties of the substrate, but does suggest that the substrate layer is air permeable based on the selection of natural fibers (e.g., abaca pulp). As such, it is the position of the Examiner that the claimed air permeability

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properties would inherently be present in the air permeable substrate layer taught by Nakagawa et al. Applicant is invited to evidence otherwise.

With regard to claim 7, Nakagawa et al., teach a heat sealable layer having a basis weight ranging from 1-20 g/m² (Section 0077).

Nakagawa et al., does not teach adding natural fibers to the heat sealing layer, however, the published WO document issued to Byalik et al., teach a heat sealing filter material comprising a combination of synthetic fibers and natural fibers (page 4, 5-15). Said layer exhibits improved seal strength and good infusion while maintaining a broad operational window (page 4, 4-10). Therefore, motivated by the desire to provide a sealing layer with improved seal strength and infusion while maintaining a broad operational window, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the sealing layer of Nakagawa et al., with a blend of synthetic and natural fiber materials as taught by Byalik et al.

The combination of Nakagawa et al., in view of Byalik et al., does not teach the claimed polypropylene grafted with maleic anhydride groups adhesion promoter, however, the patent issued to Flaris et al., teach an adhesion promoter comprising homopolymer of polypropylene grafted with maleic anhydride (abstract, column 1, 10-20, column 4, 20-40). With specific regard to the consisting of language recited in claim 1, it is the position of the Examiner that Flaris et al., meet this limitation by providing only a polypropylene grafted with maleic anhydride. The Examiner submits that peroxy is provided as a catalyst to drive the reaction between the polypropylene and maleic anhydride and is not present in the final product. Applicant is invited to prove otherwise.

Therefore, motivated by the desire to provide a heat-sealing layer with improved adhesion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the heat sealing layer in the filter laminate of Nakagawa et al., in view of Byalik et al., with the adhesion promoter of Flaris et al.

With regard to claim 3, Flaris et al., fails to teach how much adhesion promoter should be used, however, it is the position of the Examiner that it would be obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of adhesion promoter as function of desired adhesive strength. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 28, 2007
/Lynda Salvatore/
Primary Examiner
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